

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

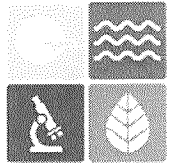
Remediation Project Difficulties & Delays

Steve Sturgess, Director
Hazardous Waste Program

July 20, 2016

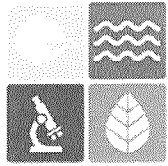
MDNR Mission

The mission of the Missouri Department of Natural Resources is to protect our air, land and water; preserve our unique natural and historic places; and provide recreational and learning opportunities for everyone.



Tanks Section Mission

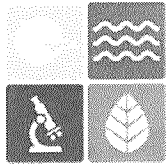
To preserve and protect the state's environment for present and future generations through the regulation of UST's to prevent and detect releases, to ensure the adequate closure of UST's, and remediation of petroleum storage tank release sites



PSTIF responsibilities*:

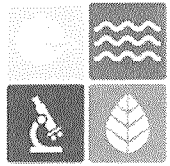
1. Insuring people who store fuel in aboveground or underground tank systems against the risk of leak causing environmental damage, and
2. Paying for cleanup of “legacy pollution” at certain properties where fuel was stored and spilled or leaked in years gone by

*excerpted from a 2009 PSTIF Publication



Section 319.129(12) RSMo

- *“The [PSTIF] board shall determine and prescribe all rules and regulations as they relate to **fiduciary management of the fund.... In no case shall the board have oversight regarding environmental cleanup standards for petroleum storage tanks.**”*

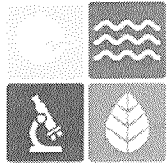


Historical Challenges

- Massive workload (16,000+ sites)
- Resource/staff constraints
 - Need more staff
- Inadequate funding
 - EPA budget cuts
- Staff retention/turnover
- RG/PE Issue
- Lack of staff follow up

Historical Challenges

- Lack of timely enforcement actions
- Evolving policies & procedures over the years
 - Many cleanups delayed during MRBCA development
- Lack of technical guidance documents
- Cleanup decisions
- Groundwater contamination challenges
 - Most sites could not be closed prior to MRBCA

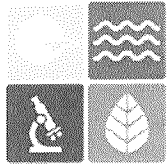


Historical Challenges

- Incomplete cleanups = sites reopened
- No viable RP's
- RP's reluctant to move forward
- \$10K deductible sometimes not met
- Consultant Challenges
- **PSTIF Issues**

PSTIF Issues

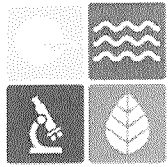
- Stopping or delaying project initiation
- Not fully funding the delineation of on-site contamination
- Not fully addressing off-site impacts
- Data sharing problems
- Consultants caught in the middle
- Opposing development and use of guidance documents
- Disagreeing with cleanup decisions



PSTIF Issues

Stopping or delaying project initiation

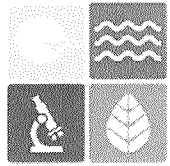
- Denying a reportable release has occurred
- Refusing to fund investigation of suspected releases



PSTIF Issues

Not fully delineating on-site contamination

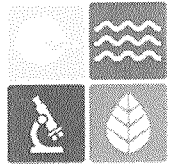
- PSTIF revising (reducing) work plans previously approved by DNR
 - Fewer borings, wells, geophysical investigations, etc.
- PSTIF adjusters revising work in the field
- PSTIF adjusters refusing to allow field modifications in response to field data
- DNR staff must choose whether to press for more data (thereby delaying work) or accept incomplete investigations



PSTIF Issues

Not addressing off-site Impacts

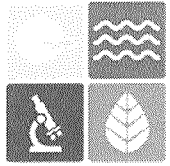
- Disagreements on “reasonably anticipated future use”
- Not investigating off-site contamination, even when there is evidence of impact
- Not addressing third-party issues
 - Vapor intrusion
 - Current or future drinking water impacts



PSTIF Issues

Data sharing problems

- PSTIF or owner's consultant sometimes do not provide site characterization data to MDNR
 - Geophysical data
 - Borings
 - Air sampling



PSTIF Issues

Consultants caught in the middle

- MDNR sets technical standards
- PSTIF challenges technical standards
- PSTIF pays invoices

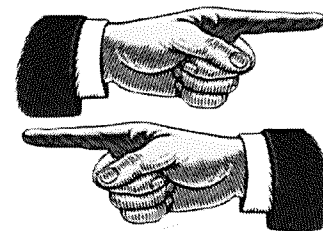


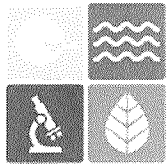
Many consultants reluctant to disobey PSTIF

PSTIF Issues

Consultants caught in the middle

- Incomplete or poor work products
 - Often results in need for more site characterization
- Deadlines not met
- MDNR's only recourse is against RP/owner, not the consultant
- RP/owner relies on expertise of consultant and PSTIF





PSTIF Issues

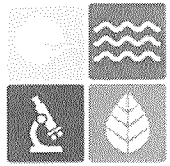
Opposing development and use of guidance documents:

- Consultants want standardized guidance
- MDNR wants standardized guidance
- MDNR willing to develop “state of the science” guidance documents
- PSTIF opposes guidance documents
- PSTIF prefers short fact sheets

Disagreeing with cleanup decisions

| Issue | Percentage of sites where this is an issue* | Percentage of sites where MDNR and PSTIF staff disagree* |
|--|---|--|
| Complete domestic use of groundwater pathway | 15% | 75% |
| Impacts to streams | 1% | 100% |
| Free product recovery | 25% | 50-75% |
| Plume stability | 95% | 50% |

***All figures are estimates provided by tanks staff**



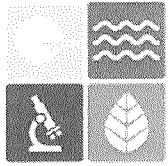
PSTIF/DNR Disagreements

Inadequate site characterization:

- Requires additional phases of investigation (re-mobilization for more wells, borings, etc.), thereby delaying project

OR

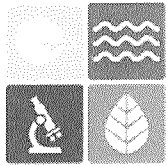
- Insufficient data for properly assessing current/future risk, corrective action options, third-party issues, etc.



PSTIF/DNR Disagreements

Inadequate site characterization

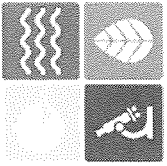
- Inadequate site characterization = unreliable cleanups
- Unreliable cleanups = possibility contamination left in place
- Possibility contamination left in place = increased owner liability and risk to public health
- End result: kicking the can down the road



PSTIF/DNR Disagreements

Disagreement with cleanup decisions

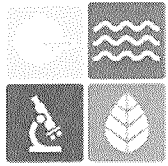
- DNR asked to issue NFA letters despite lack of data and/or technical concerns
- Sites sit idle while PSTIF and DNR staff disagree
- Disagreements delay project completion
- Last resort is dispute resolution
 -and even then, we can't agree on a process



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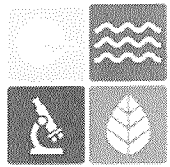
EPA Concerns



EPA 2012 Review of MDNR Tanks Program:

“...PSTIF is strongly influencing the scope of technical, corrective action services being performed.”

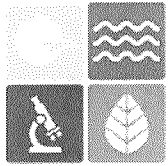
“...[PSTIF’s] reviews, questions and approvals extend beyond pricing issues. They call into question the technical merit of scope items agreed to by the consultant and MDNR and utilize the reimbursement approval/disapproval process as leverage to change the scope.”



EPA 2012 Review of MDNR Tanks Program:

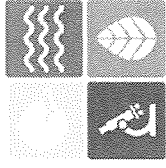
“...months are being lost on the average project due to scope/price negotiations/disagreements between the RP’s, consultants, PSTIF and the MDNR.”

“As the designated SPA implementing agency...MDNR needs to be the final arbiter of scope of work items and needs to stand their ground even when non-reimbursable scope of work items are necessary.”



EPA Regional Administrator Mark Hague's March 15, 2016 letter to PSTIF Board:

*“...PSTIF’s ‘reasonable cost’ review regularly extended beyond pricing issues to technical decisions, **effectively changing the scope of work** that the MDNR (and in some cases the responsible party and the consultant) believed to be necessary. It appears that **the current process continues to limit the scope and extent of investigations and even prevent appropriate corrective actions from being taken.**”*



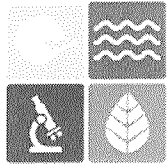
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Ideas for Improvement

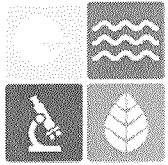
Ideas for Improvement

- MDNR and PSTIF should reevaluate their respective roles
- MDNR has the sole responsibility for making technical decisions at sites
- PSTIF should limit its role to the fiduciary management of the fund
- PSTIF can, and should, question MDNR decisions if it believes costs are excessive; however, this should be the exception, not the rule



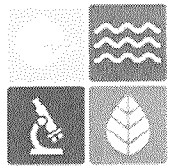
Ideas for Improvement

- MDNR should continue pursuing the Backlog Plan.
- MDNR should seek other ways to hasten the pace of cleanups, when & where possible
- MDNR should increase staff levels, if possible, to keep pace with the number of sites
 - More geologists
 - More engineers



Ideas for Improvement

- Problem – Consultants not meeting deadlines
- Potential Solutions - continue meetings between David Walters, MDNR and consultants to discuss ways to improve processes, work products and schedules



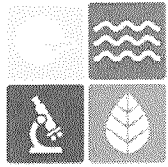
Ideas for Improvement

- Problem – Consultant reports often are not easy to review and/or are incomplete
- Potential solution - development of template reports and checklists
 - Gives consultants guidelines on what should be included in report
 - Review by MDNR easier and more timely
 - Ensures all information needed is provided
 - Should decrease back and forth comment letters
 - More timely closure

Ideas for Improvement

Problem – PSTIF refusing or inadequately addressing off-site impacts

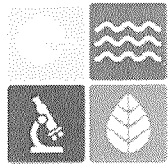
Potential solution – If off-site impact is a reasonable concern, PSTIF and MDNR should work together on standardizing procedures for access, characterization, and response to third-party contaminant exposure



Ideas for Improvement

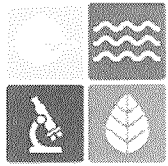
Problem – consultants do not know “how to meet the mark”

- Potential solution - additional “how to” guidance documents from MDNR
- MDNR should improve follow-up when RP’s fail to respond or take timely action



Ideas for Improvement

- MDNR staff should provide consultants better guidance
 - Missouri Risk-Based Corrective Action (MRBCA) and remediation process
 - Free Product Recovery
 - Plume Stability
 - Vapor Intrusion



Ideas for Improvement

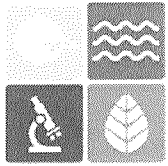
Consider removing requirement for upfront payment of \$10K deductible.

- Allow deductible be paid during or after cleanup (e.g., via proceeds of sale of remediated property)
- Payment of deductible is not a prerequisite to PSTIF funding a cleanup. 10 CSR 100-5.010(12)(F)
- More abandoned sites could be funded and move forward

Ideas for Improvement

E3 (Enhancing Effectiveness and Efficiency)

- Trained facilitation event intended to map work processes
- Purpose is to identify inefficiencies and areas that can be improved
- Results in streamlined processes
- An E3 Tanks event will be held later this year



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Thank you

Steve Sturgess, Director
MDNR/Hazardous Waste Program
steve.sturgess@dnr.mo.gov

